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By: Nancy Ramos Printed: Nancy Ramos

JC939 U.S. PTO
09/840746
04/23/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Huei-Mei Chen, Cynthia D.Honchell

Title: MUCIN-RELATED TUMOR MARKER

Serial No.: To Be Assigned

Filed: Herewith

Examiner: To Be Assigned

Group Art Unit: To Be Assigned

Commissioner for Patents
Box Sequence
Washington, D.C. 20231

SUBMISSION UNDER 37 CFR §1.821- 1.825 SEQUENCE LISTING

Sir:

In accordance with the requirements of 37 CFR §1.821- 1.825, Applicants hereby submit one (1) diskette containing the computer-readable information for the "Sequence Listing" of the above-identified application. The diskette complies with the requirements of 37 CFR §1.824 and is IBM PC compatible using a UNIX operating system with PERL Program.

Accompanying the application is the paper copy of the Sequence Listing as disclosed in the application.

The content of the "Sequence Listing" paper copy is identical to the computer readable copy, as required under 37 CFR § 1.821(f).

Respectfully submitted,

INCYTE GENOMICS, INC.

Date: April 23, 2001

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102240-94201860

PC-0039 US

<110> Chen, Huei-Mei
Honchell, Cynthia D.
Tang, Y. Tom

<120> Mucin-Related Tumor Marker

<130> PC-0039 US

<140> To Be Assigned

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ctagacttca gtgcaggacc tggttttccc ttctgttgca ctttagtaaa ttgggtggga 60
ggtttctctt tggatctgtt ttgagactgt tccagaaaaga aggtcttctt tcccagaca 120
cttccatagg cagcaatttg gtgattcatt tgcagcaaaa tactggcttg ttaattattt 180

```

```

tctctgccag cgccctgcgtg ctaaaacaaca gatgaggatg agcgtaccac tgaagtctga 240
agatgtcgcc attgaacgga cagtggtttc atatgtttct aggttgtctt atgctacagt 300
ttccaagcca gccccacag tgaggaaatg tgtgaggcac cgcacacaac tgaatgtgt 360
tttttaagtc aaggtgcac atgtatttaa gatTTTTTTT taaaatctct ttgcagttaa 420
atctcacttt ttcaaacaaag cctggatcag ggcaaaaacaa cttatatattg gttttagctg 480
gaggctcagc aggcagattg caggcagctg ggcacttttc atccatgaga ggcagcctg 540
gggcctggga ctctgatcac catttgtg 567

```

```

<210> 11
<211> 600
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<223> Incyte ID No: 70650868V1

```

```

<400> 11
ctcacttcat ccaaaaccag gatgcccacaa agaaggccaa taaacacagt tccccagggtg 60
gcaattaaag acaccgagta ctggatgtct cctctggcagg accccacatca caggcataat 120
aaataagatg agtggaaact ccttcccgaag ggtcaaccct cagttctctg accaacccga 180
agtcttcagt ttccccacac tgactgggaag tataaccacg tttctggagg gtgcgacaca 240
gccatagtga gagggtacaaa tgactgggtg agaaaaaaa gttatttctt cagccgaata 300
aacagctttg agtggttgaa agtttacctg ggggtttgtg acatgagatt ctgggtacaa 360
agtgtctcag tagccgtgtg gcaaaactcat gtgtggctcc atctcggctc cctgttcttc 420
ctcaggaatc cacacagctt cccaaagcac tgttgatgca ggaaatctaa cctggctatt 480
cagcccatcc ctctaaccac atccagctgc aggggtctaa caagctgctt tcttagagtg 540
gtgaaacctg cgttcagttt gacattttct cctccataag caggttgctc tggcctccac 600

```

```

<210> 12
<211> 371
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<223> Incyte ID No: 2359874T6

```

```

<400> 12
gaagaacaaa ccatgcccgg ggcagaactg tccccagtggt ctgcaccatt tccagaaatg 60
tgaagcggga ctcccgcgtt cagggtggag acaattcttt tacctctgta ttccccccac 120
ttcatccaaa accaggatgc cccaaagaag gccataaac acagttcccc aggtggcaat 180
taaagacacc gagtctgga tgtctccctg gcaggaccca catcacaggc ataataata 240
agatgagtg aacttctctc ccgaagtcaa cctcagttc ctcgaccaac cgggaagtctt 300
cagttctccc acactgactg gaagtataac cacgtttctg gaggtgcga cacagccata 360
tgaaggaatt c 371

```

```

<210> 13
<211> 399
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<223> Incyte ID No: 2359874R6

```

```

<400> 13
cttcatatgg ctgtgtcgca cctccagaa acgtgggttat acttccagtc agtgtgggag 60
aactgaagac ttccggttgg tcgaggaact gagggttgac ctctggggaag gaagtccac 120
tcattctatt tattatgcct gtgatgtggg tctgtccagg gagacatcca gtactcgggt 180
tctttaattg ccactggggg aactgtgttt attggccttc ttgggggcat cctggttttg 240

```

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```
gatgaagtga ggggaataca gaggtaaaag aattgtctcc accctgaagc ggggagctcc 300
gcttcacatt tctggaaatg gtgcagccac tggggacagt tctgccccgg gcgatggtgt 360
ttcttcaagg ttcttcaaat ataatcccta ttcttacat 399
```

<210> 14
<211> 595
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 70650365V1

```
<400> 14
tttggggcat cctggttttg gatgaagtga ggggaataca gaggtaaaag aattgtctcc 60
accctgaagc ggggagctcc gcttcacatt tctggaaatg gtgcagccac tggggacagt 120
tctgccccgg gcgatggtgt ttcttcaagg ttcttcaaat ataatcccta ttcttacata 180
atctctgtggc ctgatggttt taagcaagaa ctctctgtgc coactgtctc caccactcac 240
catcacctcg ctgtagcaag agtcctagtc aggggaggtg catttttagta gttaaatggc 300
acctatccat gagataaata aaagagagaac tgtttttatc agtggaggct aacctaaaaat 360
ttcaaatgtg cgctttttgg aaatctgggg cctctctctc tgtagaacca atggcccttg 420
gtgggtcacg gcctcgacac ctaactggag agttctgagc tctctgagct caccctgagct 480
cacagactag gcttcttggc tccttcgcga gcaggctggt tcaccccaga acccgagctc 540
gtgggaagag ccatgtaggg aggcctaacc caggcatata cttccactgc cttca 595
```

<210> 15
<211> 549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1241344R6

<220>
<221> unsure
<222> 442, 460, 515
<223> a, t, c, g, or other

```
<400> 15
acctaaactgg agagttctga gctcctgcag ctccactgag cccacagact aggettcttg 60
gctccttcgc cagcatgcct gctcaccgcc agaaccgcga gctgtgggaa gagccatgta 120
gggaggtcat tcccaggcat acacttcacg tgccttcacg tgacgtcaca gctgacaaat 180
catctcctct atcggagcca gaagacttca gctccacaaa atgaagtgtt ctgtcctgaa 240
aacattcttg ggaagaatcc caacatcgag aaaacggtgt cctgtgagtt ccaacaatgc 300
ttctttgtca tgggttttct ccgtatggag tggattaaga gtgttttatt ttgtgttct 360
aactgagaaa aaaaggaggc acccacaagg ttgaggtcac acagtctcca cagtttcag 420
gaggcgtttg ggggtgggga angcacctcc agagcatgan ggctctaagg ggacatgagt 480
aaagcatgtc tgtgacccag tgaggaaaagg gagangccag ctgcactcct gcaacggggg 540
ttcttagct 549
```

<210> 16
<211> 272
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 008938H1

<220>

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<221> unsure
<222> 75, 106, 112, 163, 167, 192, 252
<223> a, t, c, g, or other

<400> 16
ggagaggcca gctgcaactcc tgcacgggggt tcttagctgc agaaggggtcc cgcctaggcc 60
gaggggaaac acctnatagc agaagaggcc tggatgcaca cctggnaagc cnaggctctc 120
cgccagaca cagtgtctcca tgtcaacccc tgcacctggg gtntgttatt cactgtgaca 180
gatgccacaa tncctgaccca atatccaca gatgggggaa ggtgagagga agggggcaagt 240
aatgtgtacc tncctcaagag atgcttaaac ct 272

<210> 17
<211> 424
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2580841F6

<220>
<221> unsure
<222> 162, 251
<223> a, t, c, g, or other

<400> 17
ggtttaagct ccagagggtc ttattgccat tgtcttttcc tctgcccctt gagccagcct 60
aaggccctgg agtctgtttc tttaggggga tgaactgaca tgcctctacc atgaccagyc 120
tctgggcaag gctcctcaca gtatccttga gaggtgggca tngaagtgcc catttctcag 180
gtacagaaac cttaagagag gataaatagc ttgcccctga gaagcaggac tgaaacccct 240
gtccgctga ntccccagc tactctgccc actgtagccc cctgccttac tgcctctggca 300
caccctcac catcctgtat accttaata tcaaagaggg caagagagaa agggcttta 360
agataagtta tttttttaag gaaccttaat attattttta agaagtaaac aaattagtga 420
cgtg 424

<210> 18
<211> 430
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 70621193V1

<400> 18
cctggtagac ccctcaccat cctgtatacc ttaaataatca aagaggggcaa gagagaaagg 60
gctttaaaga taagttattt ttttaaggaa ccttaaatatt atttttaaga agtaaccaaa 120
tagtgacgt gaaatgcaaa aaaaaaaaaa aaaaatgtct gactaccctt ttggaaaaagt 180
gtgcttccag attggctttt ttatagtgtt attcctttaga cacttggtca ttaagaaaaa 240
tagtggcggg ctgggtgcttc agcaagaagc acacggggcac ggtggcttgc gatataggag 300
gtggaaggca aggaccgggt gtttctggac aggtggcggc cagacttaca ctcccatctg 360
gagagctggt ggcttttgct ccctgggtag ggccatgggt tcccacatct tactgggaag 420
catagggtg 430

<210> 19
<211> 957
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature

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<223> Genbank ID No: g2853301

<400> 19

Ile Thr Ile Thr Glu Thr Thr Ser His Ser Thr Pro Ser Tyr Thr
1 5 10 15
Thr Ser Ile Thr Thr Thr Glu Thr Pro Ser His Ser Thr Pro Ser
20 25 30
Tyr Thr Thr Ser Ile Thr Thr Thr Glu Thr Pro Ser His Ser Thr
35 40 45
Pro Ser Phe Thr Ser Ser Ile Thr Thr Thr Glu Thr Thr Ser His
50 55 60
Ser Thr Pro Ser Phe Thr Ser Ser Ile Arg Thr Thr Glu Thr Thr
65 70 75
Ser Tyr Ser Thr Pro Ser Phe Thr Ser Ser Asn Thr Ile Thr Glu
80 85 90
Thr Thr Ser His Ser Thr Pro Ser Tyr Ile Thr Ser Ile Thr Thr
95 100 105
Thr Glu Thr Pro Ser Ser Ser Thr Pro Ser Phe Ser Ser Ser Ile
110 115 120
Thr Thr Thr Glu Thr Thr Ser His Ser Thr Pro Gly Phe Thr Ser
125 130 135
Ser Ile Thr Thr Thr Glu Thr Thr Ser His Ser Thr Pro Ser Phe
140 145 150
Thr Ser Ser Ile Thr Thr Thr Glu Thr Thr Ser His Asp Thr Pro
155 160 165
Ser Phe Thr Ser Ser Ile Thr Thr Ser Glu Thr Pro Ser His Ser
170 175 180
Thr Pro Ser Ser Thr Ser Leu Ile Thr Thr Thr Lys Thr Thr Ser
185 190 195
His Ser Thr Pro Ser Phe Thr Ser Ser Ile Thr Thr Thr Glu Thr
200 205 210
Thr Ser His Ser Ala Arg Ser Phe Thr Ser Ser Ile Thr Thr Thr
215 220 225
Glu Thr Thr Ser His Asn Thr Arg Ser Phe Thr Ser Ser Ile Thr
230 235 240
Thr Thr Glu Thr Asn Ser His Ser Thr Thr Ser Phe Thr Ser Ser
245 250 255
Ile Thr Thr Thr Glu Thr Thr Ser His Ser Thr Pro Ser Phe Ser
260 265 270
Ser Ser Ile Thr Thr Thr Glu Thr Pro Leu His Ser Thr Pro Gly
275 280 285
Leu Pro Ser Trp Val Thr Thr Thr Lys Thr Thr Ser His Ile Thr
290 295 300
Pro Gly Leu Thr Ser Ser Ile Thr Thr Thr Glu Thr Thr Ser His
305 310 315
Ser Thr Pro Gly Phe Thr Ser Ser Ile Thr Thr Thr Glu Thr Thr
320 325 330
Ser Glu Ser Thr Pro Ser Leu Ser Ser Thr Ile Tyr Ser Thr
335 340 345
Val Ser Thr Ser Thr Thr Ala Ile Thr Ser His Phe Thr Thr Ser
350 355 360
Glu Thr Ala Val Thr Pro Thr Pro Val Thr Pro Ser Ser Leu Ser
365 370 375
Thr Asp Ile Pro Thr Thr Ser Leu Arg Thr Leu Thr Pro Ser Ser
380 385 390
Val Gly Thr Ser Thr Ser Leu Thr Thr Thr Thr Asp Phe Pro Ser
395 400 405
Ile Pro Thr Asp Ile Ser Thr Leu Pro Thr Arg Thr His Ile Ile
410 415 420
Ser Ser Ser Pro Ser Ile Gln Ser Thr Glu Thr Ser Ser Leu Val
425 430 435

Gly Thr Thr Ser Pro Thr Met Ser Thr Val Arg Met Thr Leu Arg
 440 445
 Ile Thr Glu Asn Thr Pro Ile Ser Ser Phe Ser Thr Ser Ile Val
 455 460
 Val Ile Pro Glu Thr Pro Thr Gln Thr Pro Val Leu Thr Ser
 470 475
 Ala Thr Gly Thr Gln Thr Ser Pro Ala Pro Thr Thr Val Thr Phe
 485 490
 Gly Ser Thr Asp Ser Ser Thr Ser Thr Leu His Thr Leu Thr Pro
 500 505
 Ser Thr Ala Leu Ser Thr Ile Val Ser Thr Ser Gln Val Pro Ile
 515 520
 Pro Ser Thr His Ser Ser Thr Leu Gln Thr Thr Pro Ser Thr Pro
 530 535
 Ser Leu Gln Thr Ser Leu Thr Ser Thr Ser Glu Phe Thr Thr Glu
 545 550
 Ser Phe Thr Arg Gly Ser Thr Ser Thr Asn Ala Ile Leu Thr Ser
 560 565
 Phe Ser Thr Ile Ile Trp Ser Ser Thr Pro Thr Ile Ile Met Ser
 575 580
 Ser Ser Pro Ser Ser Ala Ser Ile Thr Pro Val Phe Ser Thr Thr
 590 595
 Ile His Ser Val Pro Ser Ser Pro Tyr Ile Phe Ser Thr Glu Asn
 605 610
 Val Gly Ser Ala Ser Ile Thr Gly Phe Pro Ser Leu Ser Ser Ser
 620 625
 Ala Thr Thr Ser Thr Ser Ser Thr Ser Ser Ser Leu Thr Thr Ala
 635 640
 Leu Thr Glu Ile Thr Pro Phe Ser Tyr Ile Ser Leu Pro Ser Thr
 650 655
 Thr Pro Cys Pro Gly Thr Ile Thr Ile Thr Ile Val Pro Ala Ser
 665 670
 Pro Thr Asp Pro Cys Val Glu Met Asp Pro Ser Thr Glu Ala Thr
 680 685
 Ser Pro Pro Thr Thr Pro Leu Thr Val Phe Pro Phe Thr Thr Glu
 695 700
 Met Val Thr Cys Pro Thr Ser Ile Ser Ile Gln Thr Thr Leu Thr
 710 715
 Thr Tyr Met Asp Thr Ser Ser Met Met Pro Glu Ser Glu Ser Ser
 725 730
 Ile Ser Pro Asn Ala Ser Ser Ser Thr Gly Thr Gly Thr Val Pro
 740 745
 Thr Asn Thr Val Phe Thr Ser Thr Arg Leu Pro Thr Ser Glu Thr
 755 760
 Trp Leu Ser Asn Ser Ser Val Ile Pro Leu Pro Leu Pro Gly Val
 770 775
 Ser Thr Ile Pro Leu Thr Met Lys Pro Ser Ser Ser Leu Pro Thr
 785 790
 Ile Leu Arg Thr Ser Ser Lys Ser Thr His Pro Ser Pro Pro Thr
 800 805
 Thr Arg Thr Ser Glu Thr Pro Val Ala Thr Thr Gln Thr Pro Thr
 815 820
 Thr Leu Thr Ser Arg Arg Thr Thr Arg Ile Thr Ser Gln Met Thr
 830 835
 Thr Gln Ser Thr Leu Thr Thr Thr Ala Gly Thr Cys Asp Asn Gly
 845 850
 Gly Thr Trp Glu Gln Gly Gln Cys Ala Cys Leu Pro Gly Phe Ser
 860 865
 Gly Asp Arg Cys Gln Leu Gln Thr Arg Cys Gln Asn Gly Gly Gln
 875 880
 Trp Asp Gly Leu Lys Cys Gln Cys Pro Ser Thr Phe Tyr Gly Ser
 885

	890		895		900
Ser Cys Glu Phe	Ala Val Glu Gln Val	Asp Leu Asp Ala Glu	Asp		
	905		910		915
Phe Cys Arg His	Ala Gly Leu His Leu	Gln Gly Cys Gly Asp	Pro		
	920		925		930
Val Pro Glu Glu	Trp Gln His Arg Gly	Gly Leu Pro Gly Pro	Ala		
	935		940		945
Gly Asp Ala Leu	Gln Pro Pro Ala Gly	Glu Arg Val			
	950		955		

<210> 20

<211> 528

<212> PRT

<213> Sus scrofa

<220>

<221> misc_feature

<223> Genbank ID No: g915208

<400> 20

Pro Ile Ser Val	Gln Pro Ser Ser Ser Ser	Ser Ser Pro Thr Thr	Thr
1	5	10	15
Ser Thr Thr Ser	Val Gln Ser Ser Ser Ser	Ser Ser Val Pro Ile	
	20	25	30
Pro Ser Thr Thr	Ser Val Gln Pro Ser Ser	Ser Gly Ser Ala Pro	
	35	40	45
Thr Thr Ser Ala	Thr Ser Val Gln Thr Ser	Ser Ser Ser Ser Pro	
	50	55	60
Pro Ile Ser Ser	Thr Ile Ser Val Gln Thr	Ser Ser Ser Ser Ser	
	65	70	75
Val Pro Thr Thr	Ser Thr Thr Ser Val Gln	Pro Ser Ser Ser Ser	
	80	85	90
Ser Ala Pro Thr	Thr Arg Ala Thr Ser Val	Gln Ser Ser Ser Ser	
	95	100	105
Ser Ser Ala Pro	Ile Ser Ser Thr Thr Ser	Val Gln Pro Ser Ser	
	110	115	120
Ser Gly Ser Val	Pro Thr Thr Ser Ala Thr	Ser Val Gln Ser Ser	
	125	130	135
Ser Ser Ser Ser	Ala Pro Thr Thr Ser Ala	Thr Ser Val Gln Pro	
	140	145	150
Ser Ser Ser Ser	Ser Pro Pro Ile Ser Ser	Thr Val Ser Val Gln	
	155	160	165
Pro Ser Ser Ser	Ser Ser Ala Pro Thr Thr	Ser Ala Thr Ser Val	
	170	175	180
Gln Pro Ser Ser	Ser Ser Ser Pro Pro Ile	Ser Ser Thr Val Ser	
	185	190	195
Val Gln Thr Ser	Ser Ser Ser Ser Val Pro	Thr Thr Ser Thr Thr	
	200	205	210
Ser Val Gln Pro	Ser Ser Ser Ser Ser Val	Pro Thr Thr Ser Ala	
	215	220	225
Thr Ser Val Arg	Ser Ser Ser Ser Ser Ser	Thr Pro Ile Pro Ser	
	230	235	240
Thr Thr Ser Val	Gln Pro Ser Ser Ser Ser	Ser Ala Pro Thr Thr	
	245	250	255
Ser Ala Thr Ser	Val Gln Pro Ser Ser Ser	Ser Ser Thr Pro Ile	
	260	265	270
Pro Ser Thr Thr	Ser Val Gln Pro Ser Ser	Ser Ser Ser Ala Pro	
	275	280	285
Thr Thr Ser Ala	Thr Ser Val Gln Pro Ser	Ser Ser Ser Ser Pro	
	290	295	300
Pro Ile Ser Ser	Thr Ile Ser Val Gln Pro	Ser Ser Ser Ser Ser	

	305		310		315
Ser Pro Thr Thr Ser Thr Thr Ser Val Gln Pro Ser Ser Ser Gly					
	320		325		330
Ser Ala Pro Thr Thr Ser Ala Thr Ser Val Gln Pro Ser Ser Ser					
	335		340		345
Ser Ser Pro Pro Ile Ser Ser Thr Ile Ser Val Gln Pro Ser Ser					
	350		355		360
Ser Ser Ser Ser Pro Thr Thr Ser Thr Thr Ser Val Gln Pro Ser					
	365		370		375
Ser Ser Gly Ser Ala Pro Thr Thr Ser Ala Thr Ser Val Gln Pro					
	380		385		390
Ser Ser Ser Ser Ser Val Pro Thr Thr Ser Ala Thr Ser Val Arg					
	395		400		405
Ser Ser Ser Ser Ser Ser Thr Pro Ile Pro Thr Thr Thr Ser Val					
	410		415		420
Gln Pro Ser Ser Ser Ser Ser Val Pro Thr Thr Ser Ala Thr Ser					
	425		430		435
Val Gln Thr Ser Ser Ser Ser Ser Thr Pro Ile Pro Ser Thr Thr					
	440		445		450
Ser Val Gln Pro Ser Ser Ser Ser Ser Ala Pro Thr Thr Ser Ala					
	455		460		465
Thr Ser Val Gln Pro Ser Ser Ser Ser Ser Pro Pro Ile Ser Ser					
	470		475		480
Thr Ile Ser Val Gln Pro Ser Ser Ser Ser Ser Ser Ser Pro Thr Thr					
	485		490		495
Ser Thr Thr Ser Val Gln Pro Ser Ser Ser Gly Ser Ala Pro Thr					
	500		505		510
Thr Ser Ala Thr Ser Val Gln Pro Ser Ser Ser Ser Ser Pro Pro					
	515		520		525
Ile Ser Ser					